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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,477	10/23/2000	Gilbert Moincau	13693-8US AD/bns	8162

20988 7590 02/28/2007

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EXAMINER	
BATES, KEVIN T	
ART UNIT	PAPER NUMBER
2155	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/830,477	MOINEAU ET AL.	
	Examiner	Art Unit	
	Kevin Bates	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11-19,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9, 11-19, and 21-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

This Office Action is in response to a communication made on January 24, 2007.

Claims 10 and 20 have been cancelled.

Claims 1-9, 11-19, and 21-22 are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 11, 13-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatia (6023724) in view of Strentzech (6256671).

Regarding claim 1, Bhatia teaches a network modern device connecting a Local Area Network (LAN) to a remote network (Column 4, lines 36 – 39), comprising: a local store containing a list of host names and attribute data (Column 6, lines 1 – 8): a Domain Name Service (DNS) relay module (Column 6, lines 15 – 18); and a router having a LAN interface connected lo said LAN (Figure 1, element 340; Column 14, lines 19 – 20), a local connection to said DNS relay module and a network connection, to said remote network (Column 4, lines 45 – 47; Column 6, lines 11 – 14), wherein said DNS relay module uses said list and said attribute data to respond to requests, received from said LAN via said muter on said local connection (Column 6, lines 1 – 8), for a

numeric address in response to a domain name when said domain name requested is on said list (Column 6, lines 15 – 18), and said DNS relay module generates a DNS request and transmits said DNS request to an external DNS on said remote network via said local connection to said router, and said DNS relay module returning a reply from said external DNS to said LAN via said local connection to said router to respond to said request for a numeric address when said domain name requested is not on said list (Column 6, lines 15 – 29).

Bhatia does not explicitly indicate a list of domain names looked up on an external DNS corresponding attribute data and that the DNS relay module uses said list and attribute data without connecting to said external DNS when resolving said domain name.

Strentzsch teaches a network device that connects a LAN and remote network (Column 5, lines 29 – 33), which includes a proxy name cache (Column 5, lines 54 – 56). The network device includes a DNX Proxy name cache that maintains a list of domain names looked up on an external DNS corresponding attribute data and uses said list and attribute data without connecting to said external DNS when resolving said domain name (Column 6, lines 11 – 36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Strentzsch's teaching in Bhatia's system in order to allow Bhatia's system to allow the system to reduce the number of times the network device needs to query the name server.

Regarding claim 2, Bhatia teaches a network modem device as claimed in claim 1, wherein said attribute data is an IP address (Column 6, lines 4 – 5).

Regarding claim 3, Bhatia teaches a network modem device as claimed in claim 1, wherein said attribute data identifies a domain or host name as a local station on said LAN and said, DNS relay module, when said domain or host name Is identified as a local station on said LAN, replies locally to said request (Column 6, lines 1 – 18).

Regarding claim 4, Bhatia teaches a network modem device as claimed in claim 1, wherein said remote network connection is a connection to at least one ISDN channel (Column 4, lines 36 – 39).

Regarding claim 5, Bhatia teaches a network modem device as claimed in claim 4, wherein said router is connected to two ISDN channels: one for the intranet and one for the Internet (Column 5, line 64 – Column 6, line 1).

Regarding claim 6, Bhatia teaches a network modem device as claimed in claim 3, wherein said DNS relay module listens to NetBIOS Over IP packets of information on said LAN, extracts local computer names and associated IP addresses from said packets and adds said computer names and associated IP addresses to said list of domain names (Column 4, lines 56 – 61).

Regarding claim 8, Bhatia teaches the device according to claim 1, wherein said device is a digital network modem (Column 4, lines 36 – 39).

Regarding claim 9, Bhatia teaches the device according to claim 8, wherein said device is an ISDN modem (Column 4, lines 36 – 39).

Regarding claim 13, Bhatia teaches a method for relaying DNS requests on a LAN connected through a router to a remote network by a network modem device (Column 4, lines 36 – 39), comprising: a Domain Name Service (DNS) relay module (Column 6, lines 11 – 14) receiving a domain name request via said router having a LAN interface connected to said LAN (Figure 1, element 340; Column 14, lines 19 – 20), a local connection to said DNS relay module and a network connection to said remote network, on said local connection, for a numeric address in response to a domain name (Column 6, lines 1 – 18); said DNS relay module using a local store containing a list of domain or host names and attribute data to respond to said request when said domain name requested is on said list (Column 6, line 1 – 8), wherein said list comprises a list of host names declared on said LAN with corresponding attributed data (Column 6, lines 1 – 8); and said DNS relay module generating a DNS request and transmitting said DNS request to an external DNS on said remote network via said local connection to said router, and said DNS relay module returning a reply from said external DNS to said LAN via sold local connection to said router to respond to said request for a numeric address when said domain name requested is not on said list (Column 6, lines 15 – 29).

Bhatia does not explicitly indicate a list of domain names looked up on an external DNS corresponding attribute data and that the DNS relay module uses said list and attribute data without connecting to said external DNS when resolving said domain name.

Strentzsch teaches a network device that connects a LAN and remote network (Column 5, lines 29 – 33), which includes a proxy name cache (Column 5, lines 54 –

56). The network device includes a DNX Proxy name cache that maintains a list of domain names looked up on an external DNS corresponding attribute data and uses said list and attribute data without connecting to said external DNS when resolving said domain name (Column 6, lines 11 – 36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Strentzsch's teaching in Bhatia's system in order to allow Bhatia's system to allow the system to reduce the number of times the network device needs to query the name server.

Regarding claim 14, Bhatia teaches a method as claimed in claim 13, wherein said attribute data identifies a domain name as a domain name for a device on said LAN (Column 6, lines 15 – 18).

Regarding claim 15, Bhatia teaches a method as claimed in claim 13, wherein said generating comprises requesting a numeric address on said external DNS and responding to said request with a numeric address corresponding to said domain or host name (Column 6, lines 4 – 29).

Regarding claim 16, Bhatia teaches a method as claimed in claim 13, wherein said attribute data is an IP address (Column 6, lines 4 – 5).

Regarding claim 17, Bhatia teaches a method as claimed in claim 14, wherein steps of listening to NetBIOS Over IP packets of information, extracting local computer names and IP addresses from said packets and adding said computer names and IP addresses to said list of domain names (Column 4, lines 56 – 61).

Regarding claim 18, Bhatia teaches a method as claimed in claim 17, wherein said list of computer names declared on the LAN is automatically built using packets of information sent by stations on said LAN using NetBIOS Over IP protocol in which said station name and IP address is available (Column 4, lines 56 – 61; Column 6, lines 20 – 23).

Regarding claims 11 and 21; Bhatia the device according to claims 1 and 13, wherein said external DNS is one of a group of external DNS (Column 6, lines 5 – 6).

Regarding claims 7 and 19, Bhatia teaches a network modem device as claimed in claims 2 and 13.

Bhatia does not explicitly indicate a list of domain names looked up on an external DNS corresponding attribute data and that the DNS relay module uses said list and attribute data without connecting to said external DNS when resolving said domain name.

Strentzsch teaches a network device that connects a LAN and remote network (Column 5, lines 29 – 33), which includes a proxy name cache (Column 5, lines 54 – 56). The network device includes a DNX Proxy name cache that maintains a list of domain names looked up on an external DNS corresponding attribute data and uses said list and attribute data without connecting to said external DNS when resolving said domain name (Column 6, lines 11 – 36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Strentzsch's teaching in Bhatia's system in order to allow

Bhatia's system to allow the system to reduce the number of times the network device needs to query the name server.

Claims 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatia in view of Strentzsch as applied to claims above, and further in view of Huitema (6016512).

Regarding claims 12 and 22, Bhatia teaches the device as claimed in claims 1 and 13.

Bhatia does not explicitly indicate said list of domain names and attribute date has an expiry date and time, and said DNS relay module comprises a mechanism for requesting from an external DNS a newly fetched numeric address for said domain name when a next request for said domain name will be received, for restoring said newly fetched numeric address as the attribute data for said domain name In said list and for refreshing said expiry date and time

Huitema teaches that said list of domain names and attribute date has an expiry date and time, and said DNS relay module comprises a mechanism for requesting from an external DNS a newly fetched numeric address for said domain name when a next request for said domain name will be received, for restoring said newly fetched numeric address as the attribute data for said domain name In said list and for refreshing said expiry date and time (Column 3, line 59 – Column 4, line 2; Column 4, lines 52 – 64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Huitema teaching in Bhatia's system in order to allow

Bhatia's system to allow the system to ensure any cached DNS information is current and up to date.

Response to Arguments

Applicant's arguments filed January 24, 2007 have been fully considered but they are not persuasive.

The mapping has been updated to confirm that the 103(a) rejection was correctly assumed to be Bhatia in view of Strentzsch. The examiner regrets any confusion and welcomes any phone calls from the applicant if there is any other confusion that needs to be cleared up from this or any other action.

Regarding the applicant arguments about the combination of the references Bhatia and Strentzsch. The applicant argues that the references are not analogous, plus the combination of the references would not succeed. The applicant also argues that the combined reference still do not teach a list of domain names looked-up on an external DNS with corresponding attribute data.

The examiner disagrees, the reference, Bhatia is directed at a LAN modem, connected between a LAN and a remote network which intercepts DNS requests that are directed over the network (See the abstract). Strentzsch teaches a gateway between a local network and a remote network (Figure 2, element 250) which also intercepts DNS requests from the client network (Column 5, lines 54 – 60). Since both references deal with local client DNS requests attempting to send them to a remote system, both references are analogous meaning, the they are both dealing with the

same field of invention. The combination of the references is also proper, the applicant seems to imply that when a combination is made all the teachings of Strentzsch must work in the system in Bhatia, which is not true. The only teaching of Strentzsch that is being used is the idea of a DNS proxy cache. The gateway in Strentzsch has may features disclosed, but one of those would provide a teaching that would improve the modem in Bhatia. As seen in Strentzsch, Column 54 – 65, a gateway, which is much alike the modem in Bhatia has an added feature of a DNS proxy, this proxy allows DNS requests to be cached on the gateway in order to allow the DNS requests of the clients to be handled at the gateway, without having to access the remote DNS servers. There is also motivation to combine this teaching of Strentzsch to the modem in Bhatia, because if the DNS requests are getting cached locally, once the first request to the DNS server is made, that request does not need to be made again because it is cached locally. That speeds up the response time of DNS requests, because they no longer need to go over the Internet as often.

Also, the combination of Bhatia and Strentzsch teaches the claimed limitation of a list of domain names looked-up on an external DNS with corresponding attribute data. Bhatia teaches a list of domain names with corresponding attribute data (Column 6, lines 1 – 8), but that list does not include the looked up domain names which are now cached. Strentzsch's teaching improves Bhatia's list by adding or altering the list by allowing caching of DNS requests that have been made or "looked-up" (Column 6, lines 14 – 18; lines 20 – 33) where it shows that if the DNS request is made to the server, the server response is added to the local cache. The local cache is referenced every time a

request is made, and if the DNS request has been previously made or looked-up, and is still located in the cache, or list, that the information in the cache will be used instead of making another request to the server. So the combination of references teaches the claimed limitation of the invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB

KB
February 17, 2007

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER